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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,476	12/18/2000	Leo G.J. Frenken	P 0275850 T 7060C	9341

909 7590 05/29/2002

PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER
COLLINS, CYNTHIA E

ART UNIT	PAPER NUMBER
1638	

DATE MAILED: 05/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/737,476	Applicant(s) FRENKEN ET AL.	
	Examiner Cynthia Collins	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-13* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-7 and 9, drawn to a method for modifying a plant to produce an antibody in a desired cellular compartment, a plant, seeds, fruits, progeny and hybrids of a plant, classified in class 800, subclass 288, for example.

II. Claims 8 and 9, drawn to a modified plant have enhanced levels of heavy chain immunoglobulins, and seeds, fruits progeny and hybrids of a plant, classified in class 800, subclass 298, subclass 288, for example.

III. Claim 10, drawn to a food product, classified in class 426, subclass 615, subclass 288, for example.

IV. Claim 11, drawn to a method for increasing pathogen resistance in a plant, classified in class 800, subclass 279, subclass 288, for example.

V. Claim 12, drawn to a method for modulating plant metabolism, classified in class 800, subclass 281, subclass 288, for example.

VI. Claim 13, drawn to a method for preparing a heavy chain immunoglobulin or an active fragment thereof, classified in class 530, subclass 412, for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions different modes of operation, different functions, and different effects. The method of

Invention I for modifying a plant to produce an antibody in a desired cellular compartment requires the introduction into a plant of a DNA sequence encoding a heavy chain immunoglobulin with an additional sequence encoding a peptide sequence capable of targeting said antibody to a desired cellular compartment, which is not required by the methods of Inventions IV, V and VI. The method of Invention IV for increasing pathogen resistance in a plant requires the introduction into a plant of a DNA sequence encoding a heavy chain immunoglobulin which binds to a plant or animal pathogen, which is not required by the methods of Inventions I, V and VI. The method of Invention V for modulating plant metabolism requires the introduction into a plant of a DNA sequence encoding a heavy chain immunoglobulin which binds to a protein present in the plant, which is not required by the methods of Inventions I, IV and VI. The method of Invention VI for preparing a heavy chain immunoglobulin or an active fragment thereof, requires extraction of a heavy chain immunoglobulin or active fragment or derivative thereof from a modified plant, which is not required by the methods of Inventions I, IV and V. Furthermore, the plant, seeds, fruits, progeny and hybrids of Inventions I and II are distinct in that the plants of invention I are prepared according to the method of claim 1, whereas the plants of Invention II may be prepared by any method, such as by breeding or by microinjection of heavy chain immunoglobulins. Additionally, the food product of Invention III is structurally and functionally distinct from the plants of Inventions I and II.

Inventions I and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product

as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product and the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). The method for preparing a heavy chain immunoglobulin or an active fragment thereof can be practiced with another materially different product, such as an animal cell transformed with an isolated nucleic acid sequence encoding a heavy chain immunoglobulin or an active fragment thereof. The modified plant can be used in a materially different process of using that product, such as a method of breeding.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, and the requirement for different areas of search, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Remarks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (703) 605-1210. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

CC
May 20, 2002

Phuong Bui
PHUONG T. BUI 5/22/02
PRIMARY EXAMINER